CLAIMS

1. An information processing apparatus comprising:

generation means for generating reference relationship information representing a correlation between design information used for a design operation, and geometry data that is obtained by the design operation;

storage means for storing said reference relationship information generated by said generation means; and

display means for employing said reference relationship information stored in said storage means to display the fact that a reference relationship is established between said design information and said geometry data.

2. The information processing apparatus according to claim 1, wherein said design information, for which said reference relationship information is generated by said generation means, is at least one of a document, a graphical representation and a table.

3. The information processing apparatus according to claim 1, wherein said geometry data, for which said reference relationship information is generated by said generation means, is data for a part, or for a portion that is a constituent element of said part.

4. The information processing apparatus according to claim 1, wherein said display means displays information representing the fact that said reference relationship is established between said design information and said geometry data, in

association with an element of said design information or said geometry data.

5. An information processing apparatus comprising:

geometry data display means for displaying geometry data that is designed;

generation means for generating reference relationship information that represents a reference relationship between said geometry data and a digital document on which the determination of said geometry data is based; and

embedding and displaying means for embedding and displaying, in an element of said geometry data to be displayed, the linking information of said digital document that is to be referred to, based on said reference relationship information generated by said generation means.

6. The information processing apparatus according to claim 5, further comprising:

designation means for designating said element that includes said linking information that is embedded and displayed by said embedding and displaying means; and

reference target display means for displaying said digital document, based on said linking information included in said designated element and said reference relationship information.

7. An information processing apparatus comprising:

design information display means for displaying design information used to design geometry data that constitutes a predetermined part or portion thereof;

generation means for generating reference relationship information for said design information to be displayed and said geometry data designed in accordance with said design information; and

embedding and displaying means for embedding and displaying, in said design information to be displayed by said design information display means, linking information that is based on said reference relationship information.

8. The information processing apparatus according to claim 7, further comprising:

designation means for designating said design information that includes said linking information that is embedded and displayed by said embedding and displaying means; and

geometry data display means, for employing said linking information included in said designated design information, and said reference relationship information, to display said geometry data designed based on said designated design information.

9. A design support system comprising:

a digital document related module for storing a digital document that includes design information or background information used for a design operation;

a geometry data related module for storing geometry data designed using said design operation; and

a reference relationship related module for generating reference relationship information representing a correlation between a predetermined digital document stored by said digital document related module and predetermined geometry data stored by said geometry data related module.

10. The design support system according to claim 9, wherein said reference relationship related module establishes a reference from digital document to geometry data and/or a reference from geometry data to digital document.

11. The design support system according to claim 9, wherein the said digital document related module calls and displays said stored digital document, and adds and displays, to said digital document, reference relationship information that is generated by said reference relationship related module as a link to reference target geometry data.

12. The design support system according to claim 9, wherein said geometry data related module calls and displays said stored geometry data, and adds and displays, to an element of said geometry data, reference relationship information that is generated by said reference relationship related module, as a link to a digital document.

13. A computer program product comprising a computer usable medium having computer program logic recorded thereon for enabling a computer to support a user's design operation, the computer program logic comprising:

generation means for enabling the computer to generate reference relationship information that represents a correlation between design information used for the design operation and geometry data that is obtained by said design operation; and

displaying means for enabling the computer to display said design information and/or said geometry data while adding, to an element of said design information and/or of said geometry data, information indicating the fact that a reference relationship is established between said design information and said geometry data.

14. A computer program product comprising a computer usable medium having computer program logic recorded thereon for enabling a computer to support a user's design operation, the computer program logic comprising:

geometry data displaying means for enabling the computer to display geometry data that is designed;

generation means for enabling the computer to generate reference relationship information that represents a reference relationship between said geometry data and a digital document on which the determination of said geometry data is based; and

embedding and displaying means for enabling the computer to embed and display, in an element of said geometry data displayed by said geometry data displaying means, the linking information of a digital document that is a reference target, based on said reference relationship information generated by said generation means.

15. The computer program product according to claim 14, wherein said computer program logic further comprises:

designation recognition means for enabling the computer to recognize that a user has designated said element including the linking information that is embedded and displayed by said embedding and displaying means; and

reference target display means for enabling the computer to display, after the designation is recognized by said designation recognition means, said digital document, based on said linking information included in said recognized element and said reference relationship information.

16. The computer program product according to claim 15, wherein, when multiple digital documents are present as the reference target, said reference target display means enables the computer to display a list of said multiple digital documents; and wherein, when it is recognized that a specific digital document on said list has been designated, said reference target display means enables the computer to display detailed information for said specific digital document.

17. A computer program product comprising a computer usable medium having computer program logic recorded thereon for enabling a computer to support a user's design operation, the computer program logic comprising:

digital document display means for enabling the computer to display digital document information used for designing geometry data that constitutes a predetermined part or portion thereof;

generation means for enabling the computer to generate information for a reference relationship between said digital document information to be displayed by said digital document display means, and geometry data designed in accordance with said digital document information; and

embedding and displaying means for enabling the computer to embed and display, in said digital document information to be displayed by said digital document display means, linking information that is based on said reference relationship information generated by said generation means.

18. A computer program product according to claim 17, wherein said computer program logic further comprises:

designation recognition means for enabling the computer to recognize that a user has designated said digital document information including said linking information that is embedded and displayed by said embedding and displaying means; and

geometry data display means for enabling the computer to employ, after the designation has been recognized by said designation recognition means, said reference relationship information generated by said generation means, and to display geometry data that is designed based on said designated

13 digital document information.

19. A design support information display method comprising the steps of:

storing information for a reference relationship between digital document information and geometry data;

searching for reference relationship information that matches a digital document to be displayed; and

displaying said digital document, while linking information to geometry data as a reference target is added to a predetermined position of the source digital document by employing said reference relationship information.

20. A design support information display method comprising the steps of:

storing information for a reference relationship between digital document information and geometry data;

searching for reference relationship information that matches geometry data to be displayed; and

displaying said geometry data, while linking information to the digital document as a reference target is added to an element of the source geometry data by employing said reference relationship information.